

0570
1024

#9



OIEP

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/864,636A

DATE: 11/06/2002 P.6
TIME: 14:17:06

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

3 <110> APPLICANT: Third Wave Technologies
 4 Allwai, Hatim
 5 Bartholomay, Christian
 6 Chehak, LuAnne
 8 <120> TITLE OF INVENTION: Detection of RNA Sequences
 10 <130> FILE REFERENCE: FORS-04944
 12 <140> CURRENT APPLICATION NUMBER: 09/864,636A
 C--> 13 <141> CURRENT FILING DATE: 2002-10-15
 15 <160> NUMBER OF SEQ ID NOS: 2640
 17 <170> SOFTWARE: PatentIn version 3.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 834
 21 <212> TYPE: PRT
 22 <213> ORGANISM: Thermus aquaticus
 24 <400> SEQUENCE: 1
 26 Met Glu Ala Met Leu Pro Leu Phe Glu Pro Lys Gly Arg Val Leu Leu
 27 1 5 10 15
 29 Val Asp Gly His His Leu Ala Tyr Arg Thr Phe Phe Ala Leu Lys Gly
 30 20 25 30
 32 Leu Thr Thr Ser Arg Gly Glu Pro Val Gln Ala Val Tyr Gly Phe Ala
 33 35 40 45
 35 Lys Ser Leu Leu Lys Ala Leu Lys Glu Asp Gly Tyr Lys Ala Val Phe
 36 50 55 60
 38 Val Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Glu
 39 65 70 75 80
 41 Ala Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Gln
 42 85 90 95
 44 Leu Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Phe Thr Arg Leu
 45 100 105 110
 47 Glu Val Pro Gly Tyr Glu Ala Asp Asp Val Leu Ala Thr Leu Ala Lys
 48 115 120 125
 50 Lys Ala Glu Lys Glu Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Arg
 51 130 135 140
 53 Asp Leu Tyr Gln Leu Val Ser Asp Arg Val Ala Val Leu His Pro Glu
 54 145 150 155 160
 56 Gly His Leu Ile Thr Pro Glu Trp Leu Trp Glu Lys Tyr Gly Leu Arg
 57 165 170 175
 59 Pro Glu Gln Trp Val Asp Phe Arg Ala Leu Val Gly Asp Pro Ser Asp
 60 180 185 190
 62 Asn Leu Pro Gly Val Lys Gly Ile Gly Glu Lys Thr Ala Leu Lys Leu
 63 195 200 205
 65 Leu Lys Glu Trp Gly Ser Leu Glu Asn Leu Leu Lys Asn Leu Asp Arg
 66 210 215 220

RAW SEQUENCE LISTING

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:06

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

```

68 Val Lys Pro Glu Asn Val Arg Glu Lys Ile Lys Ala His Leu Glu Asp
69 225                230                235                240
71 Leu Arg Leu Ser Leu Glu Leu Ser Arg Val Arg Thr Asp Leu Pro Leu
72                245                250                255
74 Glu Val Asp Leu Ala Gln Gly Arg Glu Pro Asp Arg Glu Gly Leu Arg
75                260                265                270
77 Ala Phe Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly
78                275                280                285
80 Leu Leu Glu Ala Pro Ala Pro Leu Glu Glu Ala Pro Trp Pro Pro Pro
81                290                295                300
83 Glu Gly Ala Phe Val Gly Phe Val Leu Ser Arg Pro Glu Pro Met Trp
84 305                310                315                320
86 Ala Glu Leu Lys Ala Leu Ala Ala Cys Arg Asp Gly Arg Val His Arg
87                325                330                335
89 Ala Ala Asp Pro Leu Ala Gly Leu Lys Asp Leu Lys Glu Val Arg Gly
90                340                345                350
92 Leu Leu Ala Lys Asp Leu Ala Val Leu Ala Ser Arg Glu Gly Leu Asp
93                355                360                365
95 Leu Val Pro Gly Asp Asp Pro Met Leu Leu Ala Tyr Leu Leu Asp Pro
96                370                375                380
98 Ser Asn Thr Thr Pro Glu Gly Val Ala Arg Arg Tyr Gly Gly Glu Trp
99 385                390                395                400
101 Thr Glu Asp Ala Ala His Arg Ala Leu Leu Ser Glu Arg Leu His Arg
102                405                410                415
104 Asn Leu Leu Lys Arg Leu Glu Gly Glu Glu Lys Leu Leu Trp Leu Tyr
105                420                425                430
107 His Glu Val Glu Lys Pro Leu Ser Arg Val Leu Ala His Met Glu Ala
108                435                440                445
110 Thr Gly Val Arg Leu Asp Val Ala Tyr Leu Gln Ala Leu Ser Leu Glu
111                450                455                460
113 Leu Ala Glu Glu Ile Arg Arg Leu Glu Glu Glu Val Phe Arg Leu Ala
114 465                470                475                480
116 Gly His Pro Phe Asn Leu Asn Ser Arg Asp Gln Leu Glu Arg Val Leu
117                485                490                495
119 Phe Asp Glu Leu Arg Leu Pro Ala Leu Gly Lys Thr Gln Lys Thr Gly
120                500                505                510
122 Lys Arg Ser Thr Ser Ala Ala Val Leu Glu Ala Leu Arg Glu Ala His
123                515                520                525
125 Pro Ile Val Glu Lys Ile Leu Gln His Arg Glu Leu Thr Lys Leu Lys
126                530                535                540
128 Asn Thr Tyr Val Asp Pro Leu Pro Ser Leu Val His Pro Arg Thr Gly
129 545                550                555                560
131 Arg Leu His Thr Arg Phe Asn Gln Thr Ala Thr Ala Thr Gly Arg Leu
132                565                570                575
134 Ser Ser Ser Asp Pro Asn Leu Gln Asn Ile Pro Val Arg Thr Pro Leu
135                580                585                590
137 Gly Gln Arg Ile Arg Arg Ala Phe Val Ala Glu Ala Gly Trp Ala Leu
138                595                600                605
140 Val Ala Leu Asp Tyr Ser Gln Ile Glu Leu Arg Val Leu Ala His Leu

```

RAW SEQUENCE LISTING

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:06

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

```

141      610      615      620
143 Ser Gly Asp Glu Asn Leu Ile Arg Val Phe Gln Glu Gly Lys Asp Ile
144 625      630      635      640
146 His Thr Gln Thr Ala Ser Trp Met Phe Gly Val Pro Pro Glu Ala Val
147      645      650      655
149 Asp Pro Leu Met Arg Arg Ala Ala Lys Thr Val Asn Phe Gly Val Leu
150      660      665      670
152 Tyr Gly Met Ser Ala His Arg Leu Ser Gln Glu Leu Ala Ile Pro Tyr
153      675      680      685
155 Glu Glu Ala Val Ala Phe Ile Glu Arg Tyr Phe Gln Ser Phe Pro Lys
156      690      695      700
158 Val Arg Ala Trp Ile Glu Lys Thr Leu Glu Glu Gly Arg Lys Arg Gly
159 705      710      715      720
161 Tyr Val Glu Thr Leu Phe Gly Arg Arg Arg Tyr Val Pro Asp Leu Asn
162      725      730      735
164 Ala Arg Val Lys Ser Val Arg Glu Ala Ala Glu Arg Met Ala Phe Asn
165      740      745      750
167 Met Pro Val Gln Gly Thr Ala Ala Asp Leu Met Lys Leu Ala Met Val
168      755      760      765
170 Lys Leu Phe Pro Arg Leu Arg Glu Met Gly Ala Arg Met Leu Leu Gln
171      770      775      780
173 Val His Asp Glu Leu Leu Glu Ala Pro Gln Ala Arg Ala Glu Glu
174 785      790      795      800
176 Val Ala Ala Leu Ala Lys Glu Ala Met Glu Lys Ala Tyr Pro Leu Ala
177      805      810      815
179 Val Pro Leu Glu Val Glu Val Gly Met Gly Glu Asp Trp Leu Ser Ala
180      820      825      830
182 Lys Gly
185 <210> SEQ ID NO: 2
186 <211> LENGTH: 839
187 <212> TYPE: PRT
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Synthetic
193 <400> SEQUENCE: 2
195 Met Asn Ser Gly Met Leu Pro Leu Phe Glu Pro Lys Gly Arg Val Leu
196 1      5      10      15
198 Leu Val Asp Gly His His Leu Ala Tyr Arg Thr Phe His Ala Leu Lys
199      20      25      30
201 Gly Leu Thr Thr Ser Arg Gly Glu Pro Val Gln Ala Val Tyr Gly Phe
202      35      40      45
204 Ala Lys Ser Leu Leu Lys Ala Leu Lys Glu Asp Gly Asp Ala Val Ile
205      50      55      60
207 Val Val Phe Asp Ala Lys Ala Pro Ser Phe Arg His Glu Ala Tyr Gly
208 65      70      75      80
210 Gly Tyr Lys Ala Gly Arg Ala Pro Thr Pro Glu Asp Phe Pro Arg Gln
211      85      90      95
213 Leu Ala Leu Ile Lys Glu Leu Val Asp Leu Leu Gly Leu Ala Arg Leu
214      100      105      110

```

RAW SEQUENCE LISTING

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:06

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

```

216 Glu Val Pro Gly Tyr Glu Ala Asp Asp Val Leu Ala Ser Leu Ala Lys
217      115      120      125
219 Lys Ala Glu Lys Glu Gly Tyr Glu Val Arg Ile Leu Thr Ala Asp Lys
220      130      135      140
222 Asp Leu Tyr Gln Leu Leu Ser Asp Arg Ile His Val Leu His Pro Glu
223 145      150      155      160
225 Gly Tyr Leu Ile Thr Pro Ala Trp Leu Trp Glu Lys Tyr Gly Leu Arg
226      165      170      175
228 Pro Asp Gln Trp Ala Asp Tyr Arg Ala Leu Thr Gly Asp Glu Ser Asp
229      180      185      190
231 Asn Leu Pro Gly Val Lys Gly Ile Gly Glu Lys Thr Ala Arg Lys Leu
232      195      200      205
234 Leu Glu Glu Trp Gly Ser Leu Glu Ala Leu Leu Lys Asn Leu Asp Arg
235      210      215      220
237 Leu Lys Pro Ala Ile Arg Glu Lys Ile Leu Ala His Met Asp Asp Leu
238 225      230      235      240
240 Lys Leu Ser Trp Asp Leu Ala Lys Val Arg Thr Asp Leu Pro Leu Glu
241      245      250      255
243 Val Asp Phe Ala Lys Arg Arg Glu Pro Asp Arg Glu Arg Leu Arg Ala
244      260      265      270
246 Phe Leu Glu Arg Leu Glu Phe Gly Ser Leu Leu His Glu Phe Gly Leu
247      275      280      285
249 Leu Glu Ser Pro Lys Ala Leu Glu Glu Ala Pro Trp Pro Pro Pro Glu
250      290      295      300
252 Gly Ala Phe Val Gly Phe Val Leu Ser Arg Lys Glu Pro Met Trp Ala
253 305      310      315      320
255 Asp Leu Leu Ala Leu Ala Ala Ala Arg Gly Gly Arg Val His Arg Ala
256      325      330      335
258 Ala Asp Pro Leu Ala Gly Leu Lys Asp Leu Lys Glu Val Arg Gly Leu
259      340      345      350
261 Leu Ala Lys Asp Leu Ala Val Leu Ala Ser Arg Glu Gly Leu Asp Leu
262      355      360      365
264 Val Pro Gly Asp Asp Pro Met Leu Leu Ala Tyr Leu Leu Asp Pro Ser
265      370      375      380
267 Asn Thr Thr Pro Glu Gly Val Ala Arg Arg Tyr Gly Gly Glu Trp Thr
268 385      390      395      400
270 Glu Asp Ala Ala His Arg Ala Leu Leu Ser Glu Arg Leu His Arg Asn
271      405      410      415
273 Leu Leu Lys Arg Leu Glu Gly Glu Glu Lys Leu Leu Trp Leu Tyr His
274      420      425      430
276 Glu Val Glu Lys Pro Leu Ser Arg Val Leu Ala His Met Glu Ala Thr
277      435      440      445
279 Gly Val Arg Arg Asp Val Ala Tyr Leu Gln Ala Leu Ser Leu Glu Leu
280      450      455      460
282 Ala Glu Glu Ile Arg Arg Leu Glu Glu Glu Val Phe Arg Leu Ala Gly
283 465      470      475      480
285 His Pro Phe Asn Leu Asn Ser Arg Asp Gln Leu Glu Arg Val Leu Phe
286      485      490      495
288 Asp Glu Leu Arg Leu Pro Ala Leu Gly Lys Thr Gln Lys Thr Gly Lys

```

RAW SEQUENCE LISTING

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:06

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

```

289          500          505          510
291 Arg Ser Thr Ser Ala Ala Val Leu Glu Ala Leu Arg Glu Ala His Pro
292          515          520          525
294 Ile Val Glu Lys Ile Leu Gln His Arg Glu Leu Thr Lys Leu Lys Asn
295          530          535          540
297 Thr Tyr Val Asp Pro Leu Pro Ser Leu Val His Pro Arg Thr Gly Arg
298 545          550          555          560
300 Leu His Thr Arg Phe Asn Gln Thr Ala Thr Ala Thr Gly Arg Leu Ser
301          565          570          575
303 Ser Ser Asp Pro Asn Leu Gln Asn Ile Pro Val Arg Thr Pro Leu Gly
304          580          585          590
306 Gln Arg Ile Arg Arg Ala Phe Val Ala Glu Ala Gly Trp Ala Leu Val
307          595          600          605
309 Ala Leu Asp Tyr Ser Gln Ile Glu Leu Arg Val Leu Ala His Leu Ser
310          610          615          620
312 Gly Asp Glu Asn Leu Ile Arg Val Phe Gln Glu Gly Lys Asp Ile His
313 625          630          635          640
315 Thr Gln Thr Ala Ser Trp Met Phe Gly Val Pro Pro Glu Ala Val Asp
316          645          650          655
318 Pro Leu Met Arg Arg Ala Ala Lys Thr Val Asn Phe Gly Val Leu Tyr
319          660          665          670
321 Gly Met Ser Ala His Arg Leu Ser Gln Glu Leu Ala Ile Pro Tyr Glu
322          675          680          685
324 Glu Ala Val Ala Phe Ile Glu Arg Tyr Phe Gln Ser Phe Pro Lys Val
325          690          695          700
327 Arg Ala Trp Ile Glu Lys Thr Leu Glu Glu Gly Arg Lys Arg Gly Tyr
328 705          710          715          720
330 Val Glu Thr Leu Phe Gly Arg Arg Arg Tyr Val Pro Asp Leu Asn Ala
331          725          730          735
333 Arg Val Lys Ser Val Arg Glu Ala Ala Glu Arg Met Ala Phe Asn Met
334          740          745          750
336 Pro Val Gln Gly Thr Ala Ala Asp Leu Met Lys Leu Ala Met Val Lys
337          755          760          765
339 Leu Phe Pro Arg Leu Arg Glu Met Gly Ala Arg Met Leu Leu Gln Val
340          770          775          780
342 His Asn Glu Leu Leu Leu Glu Ala Pro Gln Ala Arg Ala Glu Glu Val
343 785          790          795          800
345 Ala Ala Leu Ala Lys Glu Ala Met Glu Lys Ala Tyr Pro Leu Ala Val
346          805          810          815
348 Pro Leu Glu Val Glu Val Gly Met Gly Glu Asp Trp Leu Ser Ala Lys
349          820          825          830
351 Gly His His His His His His
352          835
354 <210> SEQ ID NO: 3
355 <211> LENGTH: 842
356 <212> TYPE: PRT
357 <213> ORGANISM: Artificial Sequence
359 <220> FEATURE:
360 <223> OTHER INFORMATION: Synthetic

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/864,636A

DATE: 11/06/2002
TIME: 14:17:07

Input Set : D:\04944MM.ST25.txt
Output Set: N:\CRF4\11062002\I864636A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:156; N Pos. 4,5,181,182,190,366,617,628,685,714,722,738,784,1022,1029
Seq#:156; N Pos. 1038,1053,1098,1105,1206,1227,1244,1251,1252,1253,1350
Seq#:156; N Pos. 1380,1497,1530,1569,1572,1641,1653,1655,1770,1812,2319
Seq#:156; N Pos. 2346,2396
Seq#:159; Xaa Pos. 2,63,109,186,205,209,227,228,233,240,243,244,247,260,290
Seq#:159; Xaa Pos. 329,336,340,368,414,417,418,431,551,605,773,794,798,823
Seq#:159; Xaa Pos. 833
Seq#:162; N Pos. 1,35
Seq#:166; N Pos. 1
Seq#:167; N Pos. 1
Seq#:172; N Pos. 4
Seq#:189; N Pos. 4
Seq#:223; N Pos. 1,6
Seq#:230; N Pos. 30
Seq#:231; N Pos. 1
Seq#:232; N Pos. 28
Seq#:233; N Pos. 1
Seq#:234; N Pos. 1
Seq#:413; N Pos. 19,20,21
Seq#:421; N Pos. 16,17,18
Seq#:425; N Pos. 19,20,21

VERIFICATION SUMMARY

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:07

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18377 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:156
L:18383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:0
L:18389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:180
L:18395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:360
L:18403 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:600
L:18405 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:660
L:18407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:720
L:18409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:780
L:18417 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1020
L:18419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1080
L:18423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1200
L:18427 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1320
L:18431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1440
L:18433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1500
L:18435 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1560
L:18437 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1620
L:18441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1740
L:18443 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:1800
L:18459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:2280
L:18461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:156 after pos.:2340
L:18803 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:159
L:18810 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:0
L:18819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:48
L:18828 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:96
L:18843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:176
L:18846 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:192
L:18849 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:208
L:18852 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:224
L:18855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:240
L:18858 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:256
L:18864 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:288
L:18870 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:320
L:18873 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:336
L:18876 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:352
L:18885 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:400
L:18888 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:416
L:18912 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:544
L:18921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:592
L:18954 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:768
L:18957 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:784
L:18963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:816
L:18966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:159 after pos.:832
L:19022 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:162
L:19028 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:162
L:19034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:162 after pos.:0
L:19162 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:166
L:19168 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:166 after pos.:0

VERIFICATION SUMMARY

DATE: 11/06/2002

PATENT APPLICATION: US/09/864,636A

TIME: 14:17:07

Input Set : D:\04944MM.ST25.txt

Output Set: N:\CRF4\11062002\I864636A.raw

L:19180 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:167
L:19186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:167 after pos.:0
L:19246 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:172
L:19252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:172 after pos.:0
L:19456 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:189
L:19462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:189 after pos.:0
L:20121 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:223
L:20127 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:223
L:20133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:223 after pos.:0
L:20217 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:230
L:20223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:230 after pos.:0
L:20235 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:231
L:20241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:231 after pos.:0
L:20253 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:232
L:20259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:232 after pos.:0
L:20271 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:233
L:20277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:233 after pos.:0
L:20289 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:234
L:30209 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:413
L:31028 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:421
L:31321 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:425